

CLAIMS:

1. A method for inducing tolerance in a patient to a graft from a mismatched donor comprising the steps of T cell ablation, reactivation of the thymus, and administration, from the graft donor to the patient, of cells selected from the group consisting of hematopoietic stem cells, epithelial stem cells, progenitor cells, and mixtures thereof.
2. The method of claim 1 wherein the patient's thymus has been at least in part deactivated.
3. The method of claim 2 wherein the patient is post-pubertal.
4. The method of claim 2 wherein the patient has or had a disease or treatment of the disease that at least in part deactivated the patient's thymus.
5. The method of claim 3 wherein the treatment of the disease is through chemotherapy.
6. The method of claim 1 wherein the donor hematopoietic stem cells are CD34+.
7. The method of claim 1 wherein the hematopoietic stem cells are provided about the time when the thymus begins to regenerate or shortly thereafter.
8. The method of claim 1 wherein the hematopoietic stem cells are provided at the time disruption of sex steroid mediated signaling to the thymus is begun.
9. The method of claim 1 wherein the method of disrupting the sex steroid mediated signaling to the thymus is through surgical castration to remove the patient's gonads.
10. The method of claim 1 wherein the method of disrupting the sex steroid mediated signaling to the thymus is through administration of one or more pharmaceuticals.
11. The method of claim 10 wherein the pharmaceuticals are selected from the group consisting of LHRH agonists, LHRH antagonists, anti-LHRH vaccines and combinations thereof.
12. The method of claim 11 wherein the LHRH agonists are selected from the group consisting of Eulexin, Goserelin, Leuprolide, Dioxalan derivatives, Triptorelin, Meterelin, Buserelin, Histrelin, Nafarelin, Lutrelin, Leuprorelin and Deslorelin.
13. The method of claim 11 wherein the LHRH antagonist is Abarelix.

14. A kit for the improvement of graft acceptance in a patient comprising an LHRH analog, a group of stem or progenitor cells from the donor of the graft,

15. The kit of claim 14 wherein the LHRH analog is selected from the group consisting of one or more LHRH agonists, one or more LHRH antagonists, and combinations thereof.

16. The kit of claim 14 wherein the stem or progenitor cells are selected from the group consisting of hematopoietic stem cells, epithelial stem cells, and combinations thereof.

17. The kit of claim 14 further comprising a cytokine.

18. The kit of claim 17 wherein the cytokine is selected from the group consisting of interleukin 7, stem cell factor, interleukin 2, interleukin 15, granulocyte colony stimulating factor, keratinocyte growth factor, and combinations thereof.

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